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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/042,231

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Masaki Nakano

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EXAMINER

RICHER, AARON M

ART UNIT

PAPER NUMBER

2628

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/042,231	<b>Applicant(s)</b> NAKANO, MASAKI	
	<b>Examiner</b> AARON M. RICHER	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see p. 7 of remarks, filed February 4, 2008, with respect to the 35 U.S.C. 101 rejection of claims 1 and 15-18 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claims 1 and 15-18 has been withdrawn.
2. Applicant's arguments with respect to 35 USC 103 rejections have been considered but are moot in view of the new ground(s) of rejection. Examiner recognizes applicant's argument that the previous prior art applied, U.S. Patent 6,791,624 has the same assignee as the instant application and was not published before the instant application's filing date. Therefore, examiner has instead applied the original Japanese publication of the Suga reference, which was published prior to the instant application's filing date. All rejections remain the same, but citations to U.S. Patent 6,791,624 have been replaced with citations to the translation of Japanese Publication 2001-119644.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 15-17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suga (Japanese Publication 2001-119644) in view of Yokoyama (U.S. Patent 6,449,018).

5. As to claims 1, 19, and 20, Suga discloses an image processing apparatus comprising:

resolution converting means for converting an image into a reduced image (p. 6-7, section 0037)

multiscreen synthesis means for composing one screen by arranging plural images in the one screen (drawings 10 and 11; p. 9, sections 0054-0057; p. 10, section 0062; p. 12, section 0081);

image quality adjustment value storage means for storing image quality adjustment values for plural kinds of image quality adjustment processes (p. 11, section 0068);

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of the image quality adjustment values stored in said image quality adjustment value storage means (p. 10, section 0065-p. 11, section 0066); and

control means for converting an input image into a first image to which an image quality adjustment process is executed by said image quality adjustment process means on the basis of an image quality adjustment value which is determined in advance before performing an image quality adjustment operation stored in said image quality adjustment value storage means (p. 10, section 0065-p. 11, section 0070; p. 4-5, section 0022), and similarly for converting the

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input image into a second image to which an image quality adjustment process is executed by said image quality adjustment means on the basis of an image quality adjustment value for newly performing an adjustment operation, and then for displaying the converted first and second images and a pre-conversion third image on one screen with an arranged state by said multiscreen synthesis means (p. 10-11, sections 0065-0066; p. 4-5, section 0022; p. 10, section 0060; and p. 12, section 0081; also see p. 9, sections 0056-0057 for a pre-conversion “default” third image),

wherein the image quality adjustment value which is determined in advance is a value which is not updated in the adjustment operation (values shown in drawing 8 are determined in advance; p. 10, section 0059; p. 11, section 0068; the values are described as “preset values” not adjusted values).

6. Claims 1, 19, and 20 further recite a resolution converting means that executes after a quality adjustment operation. The Suga reference, however, discloses a quality adjustment operation after a resolution converting operation (see drawings 5 and 6, described in English at p. 15, section 0099 and p. 16, section 0107; the resolution-converted image is the image later adjusted for quality). The reference differs from the claimed invention only in order of operations. *In re Burhans* 154 F.2d 690, 69 USPQ 330 (CCPA 1946) holds that selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results (See MPEP 2144.04). Applicant's disclosure appears to disclose both embodiments in which resolution adjustment occurs first (fig. 1-fig. 7; also see embodiments 1-4 described) and also

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embodiments in which resolution adjustment occurs after quality adjustment (see p. 21; the blocks can be “mutually replaced”). Applicant does not disclose any new or unexpected results from performing quality adjustment first, and in fact seems to disclose that performing resolution adjustment first is preferred, since that is the subject described in detail in the first four embodiments. Absent any new and unexpected results from performing quality adjustment first, examiner can conclude that just as in *In re Burhans*, the rearrangement of steps is *prima facie* obvious. Thus it would have been *prima facie* obvious to one skilled in the art to modify Suga to adjust quality before resolution, as in the claimed invention.

Suga further does not disclose an apparatus wherein said control means can display multiple images with respective sizes different from each other. Yokoyama, however, discloses a split screen wherein respective sizes of images can differ (fig. 3b-3c; also see col. 3, lines 2-5 for disclosure of more than two images on a screen). The motivation for this is to give priority to a “main” image (col. 1, lines 38-56). It would have been obvious to one skilled in the art to modify Suga to show different images at different sizes in order to give priority to a main image as taught by Yokoyama.

7. As to claim 15, Suga discloses an apparatus further comprising image reduction means for reducing the input image, wherein said multiscreen synthesis means composes the one screen by arranging the plural images reduced by said reduction means (p. 4-5, section 0022; p. 8-9, section 0049; p. 9, section 0058-p. 10, section 0059).

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8. As to claim 16, Suga discloses an apparatus further comprising trimming means for trimming a part of the input image, wherein said multiscreen synthesis means composes the one screen by arranging the plural images trimmed by said trimming means (p. 4-5, section 0022; p. 8-9, section 0049; p. 9, section 0058-p. 10, section 0059).

9. As to claim 17, Suga discloses an apparatus wherein the image quality adjustment value which is determined in advance before performing the image quality adjustment operation is a value which was previously set at a time of manufacturing of said apparatus (p. 11, section 0068).

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suga in view of Yokoyama and further in view of Matsuzaki (U.S. Patent 6,492,982).

11. As to claim 18, Suga discloses an apparatus wherein the image quality adjustment value includes the image quality adjustment value of each of lightness, contrast, hue, and sharpness (p. 9, section 0055). Neither Suga nor Yokoyama expressly discloses an apparatus wherein the image quality adjustment value includes chromaticity and RGB balances. Matsuzaki, however discloses these image quality adjustment values with motivation being to enhance image display (fig. 20; col. 11, lines 26-45). It would have been obvious to one skilled in the art to modify Suga in view of Yokoyama to adjust chromaticity and RGB balances in order to enhance image quality as taught by Matsuzaki.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON M. RICHER whose telephone number is (571)272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMR  
4/14/08

/Kee M Tung/  
Supervisory Patent Examiner, Art Unit 2628